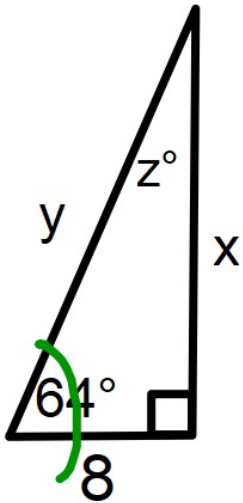
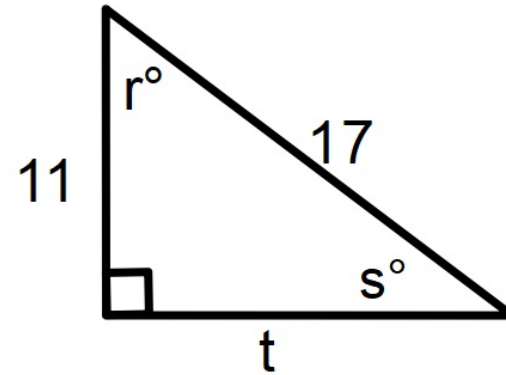


Good afternoon: find the missing values in each figure.  
Round to the nearest hundredth.



$$\sin 64 = \frac{x}{y}$$



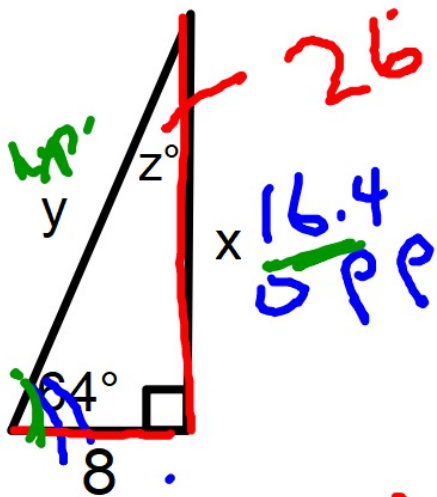
Reminders

Assessment Thursday

Tutoring/retakes today 4-5p

Retakes available in DS

$$\cos 64 = \frac{8}{y}$$



$$\text{adj. } 8^2 + 16.4^2 = y^2$$

$$\boxed{18.25 = y}$$

$$\tan 64 = \frac{x}{8}$$

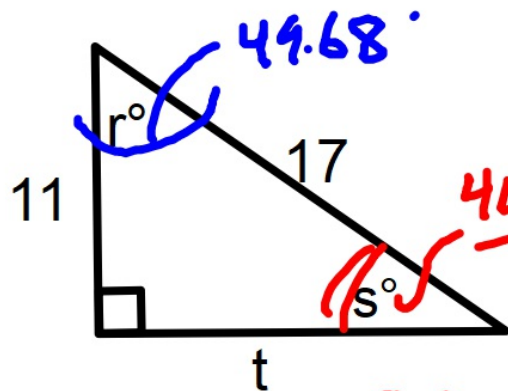
$$\frac{2.05}{1} = \frac{x}{8}$$

$$\underline{x = 16.4}$$

$$\sin 64 = \frac{16.4}{y}$$

$$\frac{0.899}{1} \times \frac{16.4}{y}$$

$$0.899y = 16.4$$
$$\underline{y = 18.25}$$



$$11^2 + t^2 = 17^2$$

$$t^2 = 281$$

$$t \approx 12.96$$

$$\approx 12.96$$

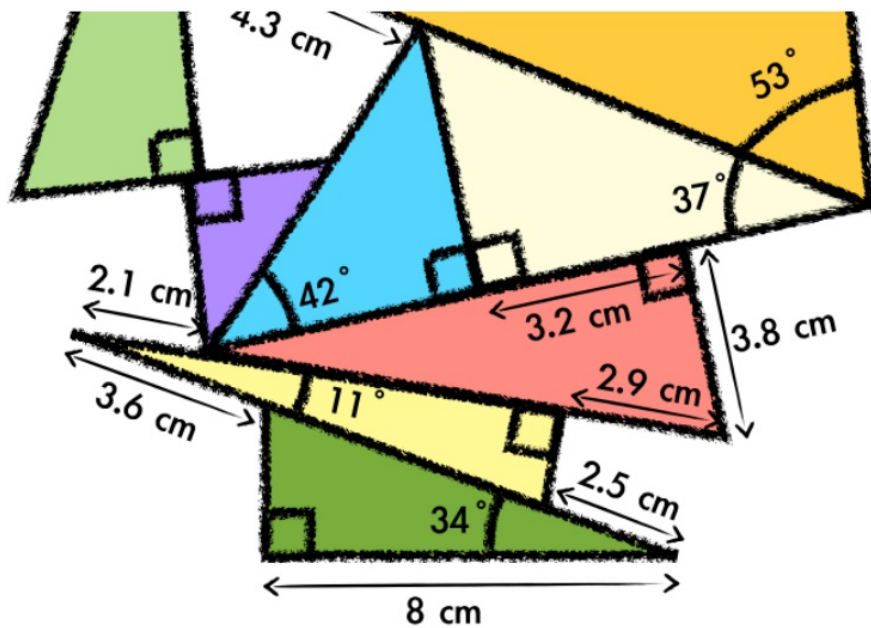
$$\cos(r^\circ) = \frac{11}{17}$$

$$\cos^{-1}\left(\frac{11}{17}\right) = r$$

SINCATR

$$49.68^\circ = r^\circ$$

Progress on the trig stack??



Ask me for the final answer!

We will do some more 3 act tasks today

Thinking question:

What questions come to mind from the picture or video?

What questions come to mind?

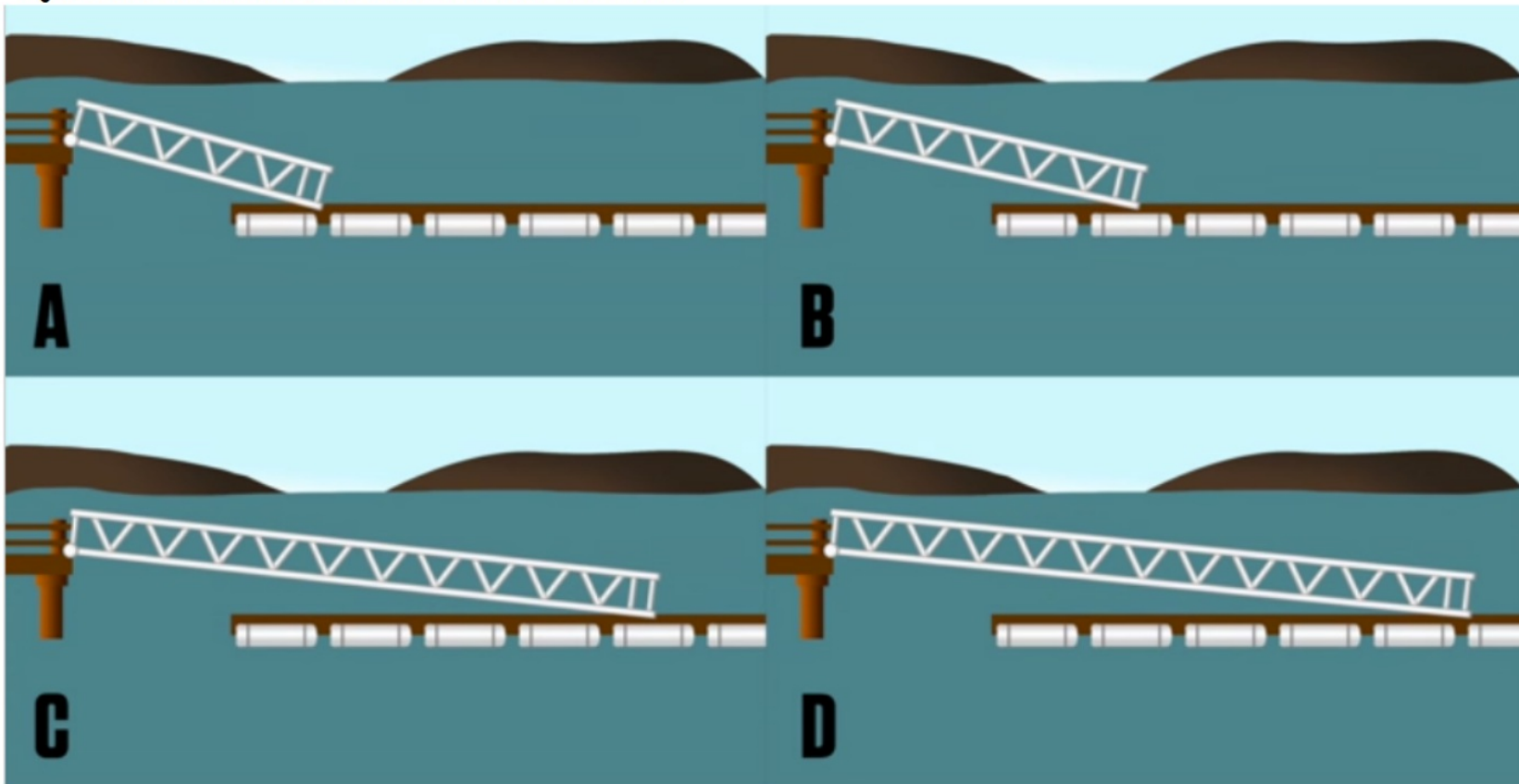




What questions could you ask about the following video?

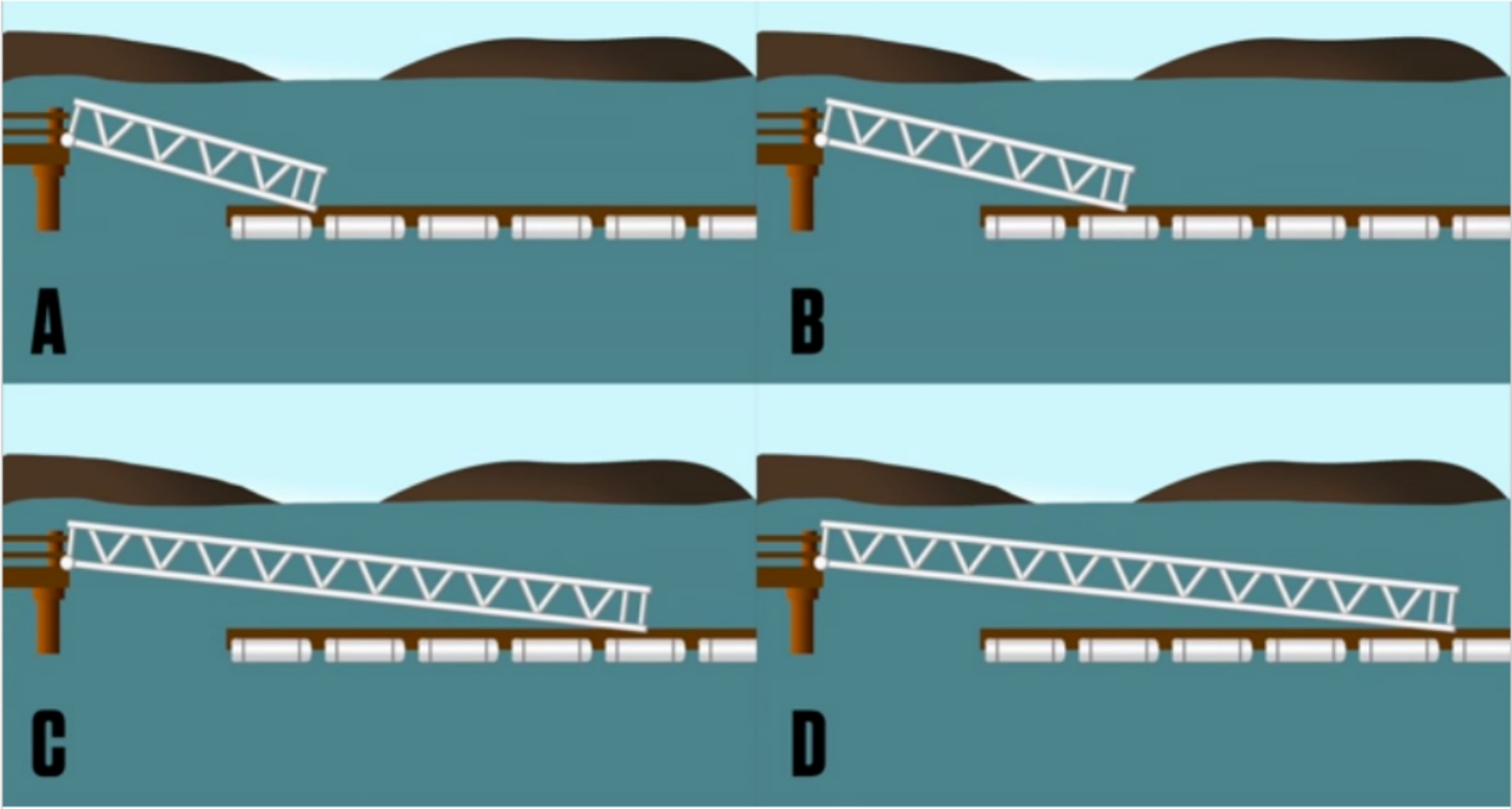
<http://www.101qs.com/3648-marine-ramp>

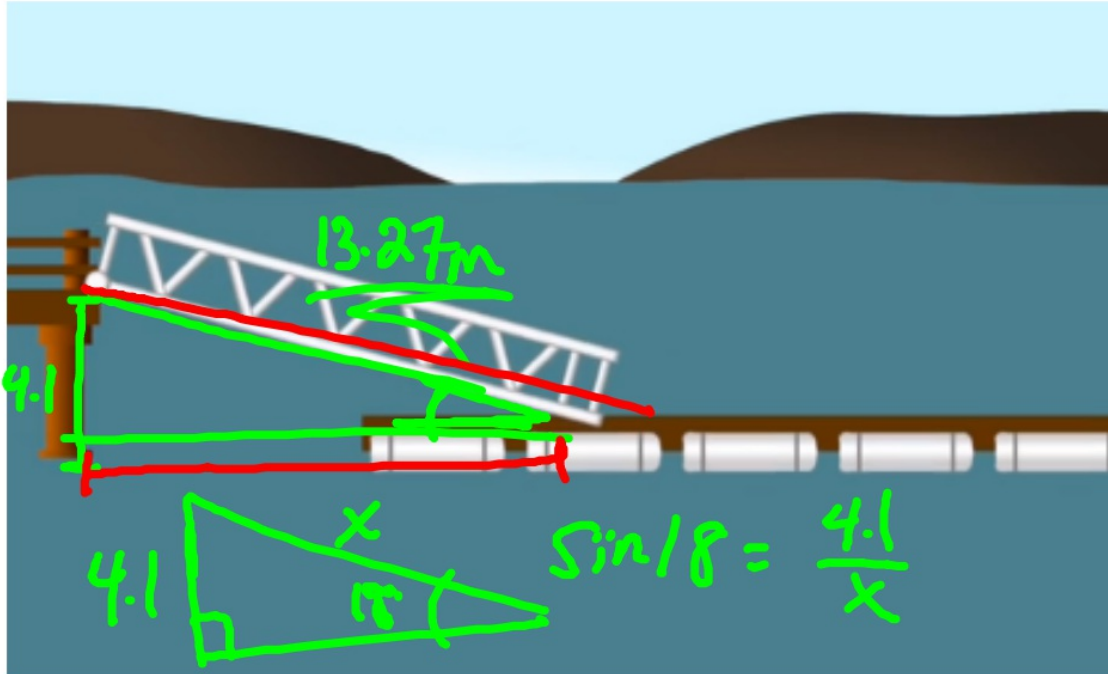
Questions that come to mind?





Which ramp is best? Why is a short/long ramp good/bad? Tell your neighbors.



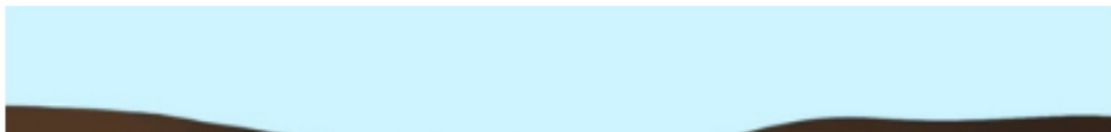
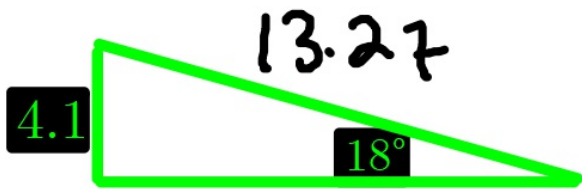


Maximum vertical  
displacement:  
4.1 meters

Maximum angle at floating pier:  
 $18^\circ$

Find a good length of ramp to use.



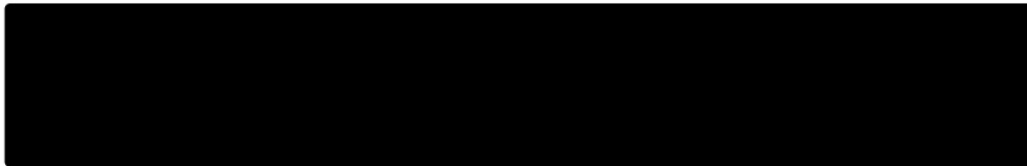


What questions does this video raise?

# Questions?



How far away am I from that building?

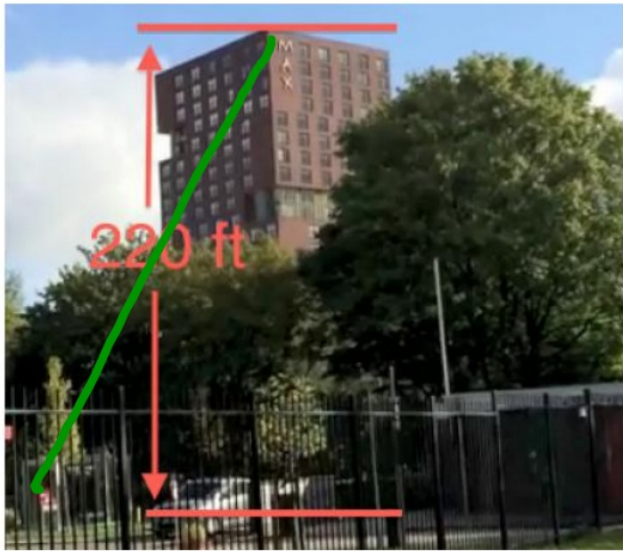


How far away is the building?

Guess.  
Write it down.





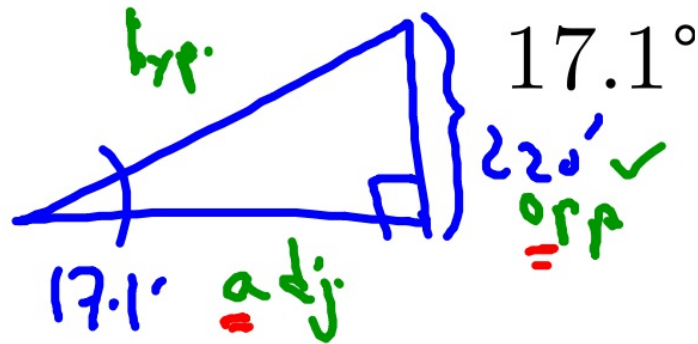


220 ft

SINCATO

How far away is the building?

approx 715 ft



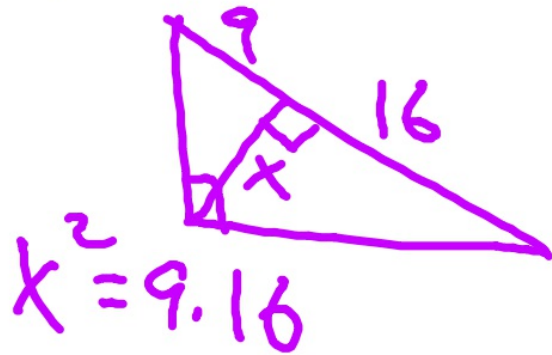
Share with your face/elbow partner  
something you understand better now  
than before.

## Thursday's Assessment:

- 7 SRT-C7a: Trig and Complementary Angles (what we're about to do)
- SRT-C8a: Applying Trig (like the 3 act tasks)

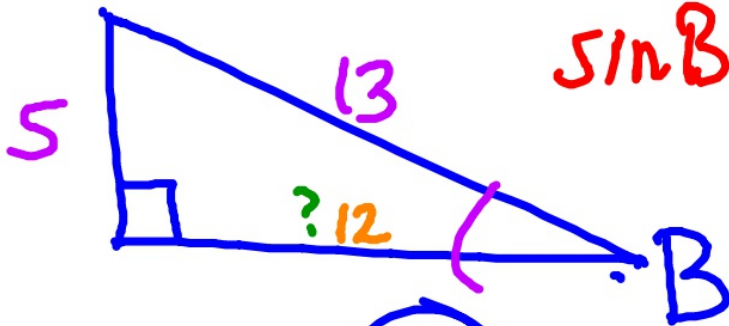
SRT-C6b: Basic Trig (includes inverses)

- SRT-B5b: Geometric Mean



## Understanding Trig More Deeply

If  $\sin B = 5/13$ , find  $\tan B$ .



$$\sin B = \frac{5}{13} \quad \text{opp} \\ \text{hyp.}$$

$$\tan B = \frac{5}{12}$$

TIP:

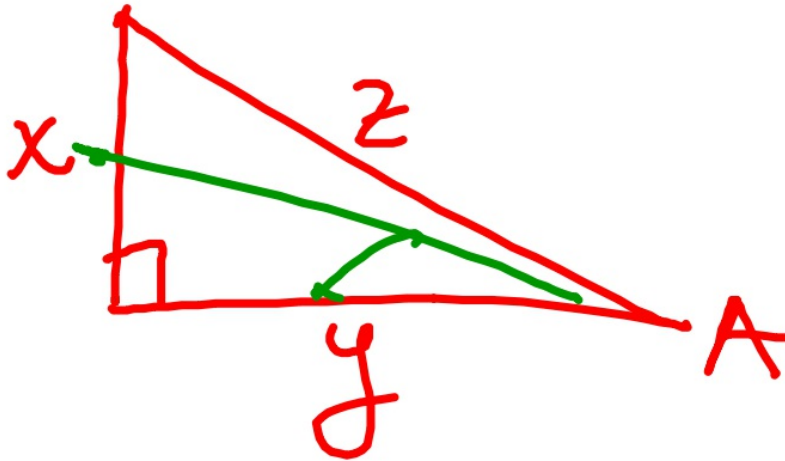
you should write these questions down so your notes make more sense later!

If  $\sin A = x/z$ , and  $\cos A = y/z$ , then what is  $\tan A$ ?

opp hyp

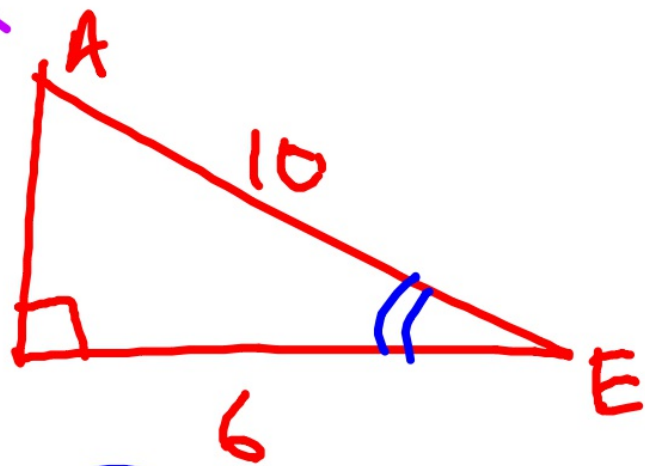
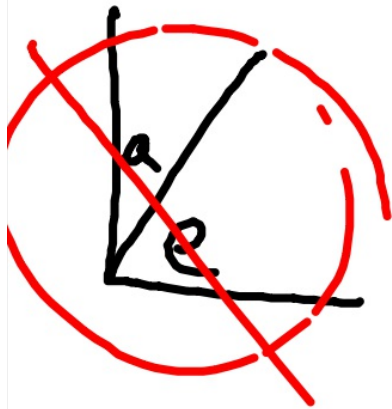
adj hyp

opp/adj



$$\frac{x}{y}$$

**A and E are complementary angles. If  $\sin A = 0.6$ , what is  $\cos E$ ?**



$\frac{6}{10}$  opp hyp

$\frac{6}{10}$



**Homework**

**do the practice assessment**

**THEN**

**check solutions/help vids at [mgeo.weebly.com](http://mgeo.weebly.com)**

**assessment is Thursday**

